

Thermal Effects in Mechanical Deformation
Especially of High Polymers, by A. Engelter,
F. H. Muller, 51 p.

GERMAN, per, Kolloid Zeit, 1958, Vol CLVII,
No 2, pp 89-111.

SLA 59-17253

Sci

Jan 60

Vol 2, No 6 . . . 11 -

103,758

The Crystallization of Terephthalic Acid
(X-Ray) Diagram, by Heinrich Arnold, 13 pp.

SEPMAN, per, Kolloid Zeit, Vol CLVII, No 2, 1950,
pp 119-123.

SLA 59-15065

Sci - Physics

Sep 59

Vol II, No 2

100, 272

R-563

Effect of Various Short Time Stresses in Tearing
High and Low-Pressure Polyethylene, by Kaufer

GERMAN, per Kolloid Zeitschrift, Vol. CLVII, 1958,
pp 124-133

*JPRS for ARCMA

May 61

Oriented Crystallization of Polyethylene on
Rock Salt, by E. W. Fischer, 14 pp.

GERMAN, per, Kolloid Z., Vol CLIX, No 2, 1958,
pp 108-118.

ATB-35K283

Sci Phys
Jun 59
OTS I, 10

89,727

61-18834

I. Zehler, V.

Zehler, V.
ON THE PARTICLE SIZE DISTRIBUTION IN MILLED
POWDERS. [1961] [10]p. 5 refs.
Order from SLA \$1.10

61-18834

Trans. of Kolloid-Zeitschrift (West Germany) 1958,
v. 160, no. 1, p. 16-20.

DESCRIPTORS: Particles, *Ball mills, Ferrites,
Powder metallurgy, Grains (Metallurgy), Barium,
Barium compounds, *Powders.

The empirical relationship of Rosin and Rammler for
the residue $R(X) = 100 \exp(-bx)^n$, is compared with that
of Martin for the particle frequency distribution,
 $N(X) = a \exp(-bx)$. It is concluded that both relation-
ships omit the larger particle diameters. A new parti-
cle distribution function $N(X)$ is suggested, which was
proved in the evaluation of characteristic count results
on barium ferrite powder.
(Metallurgy, TT, v. 6, no. 10)

Office of Technical Services

Illers, K. H. and Jenckel, E.
MECHANICAL RELAXATION PHENOMENA IN POLY-
TETRAFLUOROETHYLENES. [1961] 21p. (11 figs.
omitted) 24 refs.
Order from SLA \$2.60

62-10549

Trans. of Kolloid-Zeitschrift (West Germany) 1958,
v. 160, p. 97-106.

DESCRIPTORS: *Polymers, *Ethylenes, *Fluorides,
Mechanical properties, Relaxation time, Viscosity,
Elasticity, Temperature, Crystallization.

The viscous-elastic characteristics of slightly crystal-
line polytetrafluoroethylene (Teflon) was studied in the
temperature range from -150° to $+150^{\circ}\text{C}$. The degree
of crystallinity was varied within wide limits. The
mechanical loss factor in this temperature range shows
three absorption regions, lying, at a frequency of 1
(Chemistry--Organic, TT, v. 7, no. 9) (over)

62-10549

I. Illers, K. H.
II. Jenckel, E.

Office of Technical Services

Surface Area and Pore Structure of Silica Gels as a
Function of their Previous History, by K. Gaertner,
Z. Kristallogr.,

5. GERMAN, par, Kolloid Z, Vol CLX, No 1, 1958,
pp 21-26.

ATS 186-GJ
ATS-822 316

Sci - Chem
Nov 59

100,386

Plasticity and Thixotropy of Fractionated
Clay Minerals, by H. Platen, A.C.F. Vinkler.
41 pp.

CHENNAI, por, Kolloid Zeitschrift, Vol CLVIII,
pp 3-22.

Nat Bu of Standards

Sci-17/1

Nov 65

62 18862

Mohr, W. L. H.
PERMEABILITY OF PLASTIC FOILS TO GASES AND
VAPOURS. (1962) 28p. 139 refs.
Order from SLA \$2.60

62 18862

Trans. of Kolloid Zeitschrift (West Germany) 1959,
v. 167, no. 3, p. 55-62.

DESCRIPTORS: *Fuels, *Gases, *Vapors, Permeability,
*Plastics, *Packaging materials, *Containers.

(Materials - Plastics, DTIC, 9, no. 9)

Office of Technical Services

Crystallization of Isotactic Poly-
propylene, by B. Von Falkai, H. A.
Stuart.

GERMAN, per, Kolloid-Zeitschrift,
Vol. CLXII, No 2, 1959, pp 138-140.

Sci - Chem
Jun 62

CSIRO
SLA 57-20762
203,381

Patent Report. Additives for Mineral Oils, by
B. Wasser, 21 pp.

GERMAN, per, Kolloid Z, Vol CLXII, No 2, 1959,
pp 141-149. 9074576

ACSIL 1254

Sci - Chem

Mar 61

145,059

Resin Formation From Formaldehyde and Melamine,
by J. F. Eilers, 19 pp.

GERMAN, per, Kolloid-Zeitschrift, Vol CLXIII,
No 2, 1959, pp 106-115.

SLA 60-14253

GE/33-782

178,271

Sci
Jan 62

Holzmüller, W. and Winterstein, G.
CONTINUOUS VISCOSITY MEASUREMENT OF HIGH
POLYMER SOLUTIONS WITH AN OSCILLATION
VISCOSIMETER. [1960] 9p. (6 figs. refs. formulae
omitted).

Order from SLA m\$1.80, ph\$1.80 61-10644

Trans. of Kolloid-Zeitschrift (West Germany) 1959
[v. 163, no. 2] p. 126-132.

151804

(Chemistry--Physical, TT. v. 5, no. 9)

61-10644

1. Polymers--Viscosity
2. Viscosimeters--Applications
1. Holzmüller, W.
- II. Winterstein, G.

Office of Technical Services

Surface Behavior of Thermally Aged Silica Gels,
by K. Gartner, R. R. Griessbach, 8 p.

GERMAN, per, Kolloid-Zeit, 1959, Vol CLXIV, No 1,
pp 8-13

ATB-32L338

Sci
Mar 60
Vol 2, No 11

109,545

60-18408

Müller, S. H. and Huff, K.
CHANGES OF THE DIELECTRIC RELAXATION
SPECTRUM OF HIGH POLYMERS ON STRETCHING
AND PRETREATMENT (POLYCARBONATE). [1960]
7p. 4 refs.

Order from SLA m\$1.80, ph\$1.80 60-18408

Trans. of Kolloid-Z[etschrift].(West Germany) 1959,
v. 164, no. 1, p. 34-37.

Dielectric measurements of polycarbonate samples of
various degrees of stretch and different pretreatment
show changes of the relaxation spectrum which corre-
spond completely with the observations on other sub-
stances investigated such as polyamides, Terylene and
so forth. (Author)

(Chemistry--Physical, TT, v. 5, no. 3)

1. Propanes--Electrical
properties
 2. Dielectric films--Physical
factors
- I. Müller, S. H.
II. Huff, K.

143,044

Office of Technical Services

Crystallization Conditions and Morphological Structures
in High Polymers, by H. A. Stuart, 27 p.

GERMAN, part, Koll-Zeit, 1959, Vol CLXV, No 1,
pp 3-15.

SLA 59-20778

Sci
Apr 60
Vol III, No 2

113,621

Keller, A.
ELECTRON MICROSCOPY AND LOW ANGLE X-RAY
SCATTERING. [1962] 20p. (figs. omitted) 7 refs.
Order from SLA \$1.60 62-18810

Trans. of Kolloid Zeitschrift [West Germany] 1959,
v. 165, no. 1, pp. 15-25.

DESCRIPTORS: *Electron microscopy, *X-rays,
Scattering, Polymers, *Single crystals, *Electron dif-
fraction analysis, Polyamide plastics, Polyethylene
plastics, Microstructure, Crystal structure

(Physics--Solid State, TT, v. 9, no. 10)

62-18810

I. Keller, A.

Office of Technical Services

Molecular Theory of Linear and Nonlinear
Relaxation Phenomena, by F. Schwarzl.
GERMAN, per, Kolloid-Zeitschrift, Vol 165,
No 1, 1959, pp 88-96.
NTC-69-16435-07D

Sci-Chem
Feb 70

403,111

Ziabicki, Andrzej.
ON THE MESOMORPHIC β -FORM OF POLYCAPROIC
AMIDE AND ITS TRANSFORMATION INTO THE
CRYSTALLINE α -FORM. June 60, 15p. 10 refs.
Order from SLA ml\$2.40, ph\$3.30 61-10214

Trans. of Kolloid Zeitschrift (West Germany) 1959,
v. 167, no. 2, p. 132-141.

The mesomorphic β -structure of polycaproic amide and
the conditions for its transformation into the crystalline
form α were investigated by means of roentgenographic,
spectrophotometric and polarizing microscope methods.
The equatorial reflection $d = 4.2 \text{ \AA}$, typical for the
 β -form in the X-ray diagram, is related to the 10.22μ
absorption band, and the reflections due to planes
(200) and (002) in the crystalline α form correspond to
the 10.42μ band. The transformation $\beta \rightarrow \alpha$ was fol-
lowed under various conditions in dependence on the
intensity changes of these reflections and absorption
bands. A structural model of the β -form, in which the
(Chemistry Organic, TT, v. 5, no. 4) (over)

61-10214

1. Amide polymers--Crystal structure
1. Ziabicki, A.

143,203

Office of Technical Services

A New Precision Instrument for the Determina-
tion of Dielectric Constants, by Ad.
Engelter, F. H. Muller, 22 pp.

GERMAN, per, Kolloid Zeitschrift,
Vol CLXVI, No 1, 1960, pp 25-30.

ATS-54843G

ATS-916-FJ

Sci
Vol IV, No 11
Jun 62

199,276

The Elastic Behaviour of PVC Under Static and
Dynamic Stress, by W. Sommer,

GERMAN, per, Kolloid-Zeitschrift, Vol CLXVII,
No 2, 1959, pp 97-131.

GB/39

Sci
Dec 62

Hess, Kurt, Gutter, Ernst, and Mahl, Hans].
THE ELECTRON MICROSCOPE REPRESENTATION
OF THE LARGE LONG PERIODS IN PERLON AND
THEIR RELATIONSHIPS TO THE STRUCTURE OF
COLLAGEN. [1960] 29p. 59 refs.
Order from SLA m\$2.70, ph\$4.80 60-18432

Trans. of Kolloid Zeitschrift (West Germany) [1960]
v. 168 [no. 1] p. 37-49.

148,341

(Chemistry--Organic, TT, v. 5, no. 7)

60-18432

1. Synthetic fibers--X-ray analysis
 2. Collagen--Molecular structure
 3. Electron microscopy--Applications
 4. Title: Perlon
- I. Hess, K.
 - II. Gutter, E.
 - III. Mahl, H.

Office of Technical Services

62-18665

Noll, W., Damm, K., and Fauss, R.
STUDY OF THE SYSTEM $\text{SiO}_2/\text{H}_2\text{O}$: SILANOL AND
WATER CONTENTS IN AMORPHOUS, HIGHLY
CONDENSED SILICIC ACIDS AND THEIR BEHAVIOR
IN DEHYDRATION AND REHYDRATION. [1962]
28p. 24 refs.
Order from SILA \$2.60

62-18665

Trans. of Kolloid Zeitschrift (West Germany) 1960,
v. 169, 158 1/2, p. 18-28.

DESCRIPTORS: *Silicic acids, Dehydration, *Silicon
compounds, Dioxides, *Water acids, Condensation,
Chemical reactions, Reaction kinetics, Gels.

(Chemistry--Physical, TT, v. 9, no. 8)

I. Noll, W.
II. Damm, K.
III. Fauss, R.
IV. Title: Silanol. . .

Office of Technical Services

61-10215

Becker, Heinz, Rechmann, Heinz, and Tillmann,
Peter.

CONTRIBUTION TO GRAIN SIZE DETERMINATION
THROUGH SEDIMENTATION ANALYSIS IN THE
EQUIVALENT DIAMETER RANGE OF 0.1 TO 10
MICRON. Sep 60, 13p, 17 refs.
Order from S.A. m\$2.40, ph\$3.30

61-10215

Trans. of Kolloid-Zeitschrift (West Germany) 1960,
v. 169, no. 1/2, p. 34-41.

An automatic sedimentation scale is described, where
a closed cylinder is immersed in the suspension to be
analyzed. It is equipped with a diagram recorder
which draws a cumulative sedimentation curve in the
form of a stepped curve. The sedimenting material
itself repeatedly reduces the paper speed of the dia-
gram strip in such a way during settlement, that a
simple graphic evaluation with high accuracy is
possible. The apparatus permits carrying out grain
distribution analyses in a range from 0.1 to 10 μ .
(Author)

1. Particles--Measurement
2. Sedimentation--Applications
- I. Becker, H.
- II. Rechmann, H.
- III. Tillmann, P.

148,476

Office of Technical Services
(Chemistry--Analytical, TT, v. 5,
no. 7)

Molecular Association Between Alcohols and
Fatty Acids in Aqueous Phases and the Solubilisation
Problem, by D. G. Dervichian.

GERMAN, per, Kolloid Z. Vol CLXIX,
No 1/2, 1960, pp 107-113.

GB/163

S i
Dec 62

Development of Morphological Structures in the
Polycarbonic Acid Ester Polycarbonate of 4, 4'-
Dioxydiphenyl-2,2-Propane, by G. Kampf.
GERMAN, per, Kolloid-Zeitschrift, Vol CLXXII, No 1,
1960, pp 50-55.
NASA TT F-9170

Sci-Chem
Jan 65
U.S. GOVERNMENT ONLY

270,964

The Pressure Dependence of the Elastic Moduli
of Polymethylmethacrylate at Room Tempera-
ture, by J. Gielessen, J. Koppelman.

RECHENUN
GERMANY, per, Kolloid Z, Vol CLXXII, No 2,
1960, pp 162-166.

TIL T 5231

181, 305

Sci - Phys

Jan 62

X-Ray Studies of the Melting and Crystallization Behavior of Polyterephthalic Acid Glycol Ester (PTGE), by H. G. Kilian.
GERMAN, per, Koll Zeit, Vol CLXXII, 1960, pp 166-177.
NASA TT P-10,877

Sci - Phys
Jun 67
GOVERNMENT USE ONLY

326,073

Flow of Rubber-like Polymers and Stocks Based on
Them With Carbon Black, by N. V. Zakharenko, et al.
GERMAN, per, Kolloid-Z, Vol XXII, No 2, 1960,
pp 168-175.
GB/57/884

Sci - Chem
Apr 64

253,315

On the Influence of the Chemical Nature of the
Surface of Carbon Black Upon the Interaction With
Rubber and Sulphur and Upon the Kinetics of
Vulcanisation, by B. A. Dogadkin, et al.
GERMAN, per, Kolloid Z, Vol ~~XXII~~, No 6, 1960,
pp 663-670.
GB/57/886

Sci - Chem
Apr 64

253,350

Kinetics of Protein Denaturation. 2. Mechanism
of the Heat Aggregation of Bovine Plasma Albumin
in the Neutral Range, by J. Stauff, H. Barthel.

GERMAN, per, Kolloid-Zeitschrift, Vol CLXXIV,
No 1, 1961, pp 1-11.

CSIRO/No 8895.

Sci-Chem
May 63

229,893

Stöber, W. and Arnold, M.
ANOMALIES AT THE DETACHMENT OF SILICIC
ACID FROM THE SURFACE OF FINE-GRAINED
SILICON-DIOXIDE POWDER. [1961] 12p. (11 figs.
omitted) 18 refs.
Order from SLA \$1.60

61-18847

Trans. of Kolloid-Zeitschrift (West Germany) [1961]
v. 174, no. 1, p. 20-27.

DESCRIPTORS: *Silicic acids, Separation, *Powder
metals, *Silicon compounds, *Dioxides, Solutions,
Grains (Metallurgy) Powders.

The increased initial solubility of the silicon dioxide
occurring with aqueous suspensions of fine-grained
silicon-dioxide powders has been investigated on
amorphous and crystalline powder-specimens. It has
been found that silicic acid goes into solution with an
(Chemistry--Physical, TT, v. 7, no. 1) (over)

61-18847

I. Stöber, W.
II. Arnold, M.

Office of Technical Services

Pressure-Dependence of Relaxation Phenomena
in Macromolecular Substances, by J. Koppelman,
J. Oeleman.
GERMAN, per, Kolloid Zeitschrift, Vol 175, No 2,
1961, pp 97-99.
*AEC SCL-T-67-253

Sci. - Physics
Jun 67

The Behavior of Thermal Conductivity of
Rubber During Elongation, by Heinz Lautz,
9 pp.
GERMAN, per, Kolloid Zeitschrift, Vol CLXXIV,
1961, pp 129-133. 9227146
AEC-EC-T-65703

Sci-Phys
Apr 65

277,081

Quasi-Stationary Measurement of the Thermal
Conductivity of Plastics in the Temperature
Range From -180°C to 90°C , by K. Eiermann,
K. E. Hellwege, 20 pp.

GERMAN, per, Kolloid Zeitschrift, Vol CLXXIV,
No 2, 1961, pp 134-142.

CIA/FDD XX-1611
NO FOREIGN DISSEM

USIB Internal Use Only
Sci. Engr
Nov 64

ATC-Sc 7-64-1618
(9226164)
269,109

Schilling, Helmut.
PHYSICAL INVESTIGATIONS ON MOLDED OBJECTS
FROM POLYACROLEIN. [1961] [16]p. 23 refs.
Order from SLA \$1.60 61-20503

Trans. of Kolloid-Zeitschrift (West Germany) 1961,
v. 175, p. 110-119.

DESCRIPTORS: *Acroleins, *Polymers, Molding,
Pressure, *Molding materials, Heating, Acrylonitriles,
Catalysts, Molecular association, Molecular struc-
ture, Crystallization, Oxidation reduction reactions.

In the present work, the molding experiments with
powdered polyacrolein in the pressure region from
800 kg/cm² to 18,000 kg/cm² are reported. It was
found that a crosslinking reaction occurs in polyacro-
lein under the influence of pressure. Upon heating
(Chemistry: Physical, TT, v. 7, no. 4) (over)

61-20503

I. Schilling, H.

Office of Technical Services

The Significance of the Exchangeable Ions in
the Formation of the Framework in Trioxo-
Sulfate Gels, by Weiss, Armin and Frank, R., pp.

GERMAN, par, Kolloid Zeitschrift, Vol CLXXVII, No. 1,
July 1961, pp 47-50.

ABC-CRAN-77-2398
Dept of Commerce
National Bureau
of Standards

Sci - Chem

177, 288

Dec 61

(CSM/A)

62-10480

Clamroth, R.
MEASUREMENT OF VISCO-ELASTIC CHARACTER-
ISTICS OF RUBBER VULCANIZATES AS A FUNC-
TION OF FREQUENCY, AMPLITUDE AND MEAN
ELONGATION. [1961] [45]p. 17 refs.
Order from SLA \$4.60

I. Clamroth, R.

62-10480

Trans. of Kolloid-Z[schri]ft (West Germany) 1961,
v. 177, no. 2, p. 116-128.

DESCRIPTORS: *Rubber, *Vulcanizates, Viscosity,
Elasticity, Measurement, Stresses, Deformation,
Test methods, Frequency, Amplitude modulation

From forced vibrations on samples stressed by elonga-
tion, the visco-elastic characteristics were determined
at 5 hertz as a function of the amplitude and mean elon-
gation. In vulcanizates loaded with carbon black or
active silicic acid, we find at amplitudes of 0.1% to
(Materials--Rubber, TT, v. 7, no. 9) (over)

Office of Technical Services

Heat Aggregation of Proteins in Solution, by
J. Stauff.

GERMAN, per, Kolloid Zeitschrift, Vol CLXXVIII,
No 2, 1961, pp 128-142.

CSIRO/No 5929

Sci-Chem
Mar 63

225,361

Aggregation of Protein Frcs of Disulphide and
SH-SH Sulphydryl Groups, by R. Jaenicko,
J. Stauff.

GERMAN, per, Kolloid Zeitschrift, Vol CLXXVIII,
No 2, 1961, pp 143-160.

CSIRO/No 6061

Sci-Chem

Aug 65

341,535

Schurz, J. and Windisch, K.
RHEOLOGICAL MEASUREMENTS ON CELLULOSE
ACETATE AND NATURAL RUBBER. [1961] 6p.
Order from ATS \$9.00 ATS-33N56G

Trans. of Kolloid-Zeitschrift (West Germany) 1961,
v. 177, no. 2, p. 149-153.

DESCRIPTORS: *Cellulose acetates, *Rubber,
Measurement, Viscosity.

ATS-7C7-GJ

(Materials--Plastics, TT, v. 6, no. 12)

61-25692

- I. Schurz, J.
- II. Windisch, K.
- III. ATS-33N56G
- IV. Associated Technical
Services, Inc.,
East Orange, N. J.

Office of Technical Services

Description of the Chain Structures of Stereoregular
High Polymers and Their Determination From Nuclei-Spin
Resonance, by U. Johnsen.

GERMAN, per, Kolloid Z., Vol CLXVIII, No 2, 1961,
pp 161-170.

Possibly to Come From Contacts
per 10 Dec 62 memo
USIB INTERNAL USE ONLY

Sci - Phys

Dec 62

Kinetics of Protein Denaturation. 2. Mechanism
of the Heat Aggregation of Bovine Plasma Albumin
in the Neutral Range, by J. Stauff, H. Barthel.

GERMAN, per, Kolloid-Zeitschrift, Vol CLXXIV,
No 1, 1961, pp 1-11.

CSIRO/No 5893.

Sci-Chem
May 63

Quasi-Stationary Measurement of Heat Conductivity
of Plastics in the Temperature Range From -180 to
+ 90°C, by K. Elermann, H. Hellwege, et al, 30 pp.
GERMAN, per, Kolloid Zeitschrift, Vol CLXXIV, No 2,
1961, pp 134-142. 9226164
AEC-SC-T-64-1618

Sci-Engr
Jan 65

270,612

62-18649

I. Thurn, H.

Thurn, H.
NUCLEAR RESONANCE MEASUREMENTS WITH
POLYETHYLENE. [1962] [48]p. 52 refs.
Order from SLA \$4.60 62-18649

Trans. of Kolloid Zeitschrift (West Germany) 1961,
v. 179 [no. 1] p. 11-29.

DESCRIPTORS: *Polyethylene plastics, Crystallization,
Molecular structure, *Nuclear resonance, Absorption
spectrum, *Resonance absorption.

The temperature curves of half-widths, immobile fractions, 2nd moment, 4th moment and (4th moment) $1/4$ / (2nd moment) $1/2$ were determined for different polyethylenes as a function of the degree of branching and of the limiting viscosity. Results are discussed. In the case of linear and branched polyethylenes crystallized from a xylene solution, the molecular mobility is strongly inhibited in the amorphous regions compared to a sample which had been crystallized from a melt.
(Author)

(Chemistry--Analytical, TT,
v. 9, no. 12)

Office of Technical Services

63-10817

I. Frind, H.

Frind, H.
PRODUCTION OF HIGH-TENACITY CELLULOSE
FIBERS FROM CUPRAMMONIUM-CELLULOSE
SOLUTION. 12 Sep 62 [21] p. 16 refs.
Order from SLA \$2.60 63-10817

Trans. of Kolloid-Zeitschrift (West Germany) 1961
v. 179, no. 2, p. 110-116.

DESCRIPTORS: *Fibers (Synthetic), *Cellulose,
Production, Physical properties, Solutions, *Gels,
Calcium, Copper, Chlorine, Ammonium radicals.

Attempts have been made to produce high-tenacity
cellulose fibers from cuprammonium cellulose solution.
The effect of a series of coagulating baths on the
technical cuprammonium spinning solution was in-
vestigated on a German model fiber. Here, a coagu-
lating bath (Ca^{++} , Cu^{++} , Cl^- , NH_3) was found in
(Materials--Textiles, TT, v. 10, no. 1) (over)

Office of Technical Services

Molecular Kinetic Theory of Volume Relaxation in
Amorphous High Polymers.

GERMAN, per, Kolloid Z, Vol CLXXXI, No 1, 1962,
pp 11-25.

Possibly to Come From Contacts
per 10 Dec 1962 memo
USIB INTERNAL USE ONLY

Sci - Phys

Dec 62

Zahn, H. and Pieper, W.
LONG PERIODS INDEPENDENT OF MOLECULE
LENGTH IN SMALL-ANGLE X-RAY DIAGRAMS OF
OLIGOMERS. Communication no. 27 on Oligomers.
[1962] 49p. 28 refs.
Available on loan from SLA

63-10798

Trans. of Kolloid Zeitschrift (West Germany) 1962,
v. 180, no. 2, p. 87-108.

DESCRIPTORS: Polymers, *Synthetic fibers, *Nylon,
*Isocyanate plastics, Molecular structure, Crystal
structure, X-ray diffraction analysis.

The influence of temperature pretreatment, of phenol
swelling and of the crystallization conditions on the
long period was studied by X-rays on four homologous
polymeric series of oligomers of the nylon 6, nylon
66 and polyurethane type. The degree of polymerization
was ascertained at which the oligomers of the four
(Materials--Photographic, TT, v. 9, no. 9) (over)

63-10798

I. Zahn, H.
II. Pieper, W.
III. Title: Oligomers

Office of Technical Services

Flocke, H. A.
MECHANICAL RELAXATION OF POLYETHYLENE,
POLYPROPYLENE AND MIXED POLYMERS.
9 July 62, 18p. (figs. omitted) 21 refs.
Order from SLA \$1.60 63-10824

Trans. of Kolloid-Zeitschrift (West Germany) 1962,
v. 190, no. 2, p. 118-125.

DESCRIPTORS: *Polyethylene plastics, *Propenes,
Polymers, Mixtures, Mechanical properties, Vibra-
tion, Damping, Crystallization.

The relaxation of polyethylene, polypropylene of differ-
ent tacticity, mixtures from both of these polymers, as
well as of mixed polymers from propylene and ethylene
was investigated within a temperature range of -180°C.
to 160°C. by the torsional vibration method of Sch-
mieder and Wolf. While for polymer mixtures simple
mixing rules are given for the slip modulus and damp-
(Materials--Plastics, TT, v. 10, no. 2) (over)

63-10824

I. Flocke, H. A.

Office of Technical Services

Determination of The Thermoconductivity
of the Amorphous and Crystalline Fractions
of Polyethylene, K. Eiermann.

GERMAN, per, Kolloid-Zeitschrift und
Zeitschrift fuer Polymere, Vol 150, 1962,
pp 163-4.

Sci - Materials
Jul 67

331, 5/2

Alternating Stereospecific Copolymerization
of Ethylene and 2-Butane, by G. Natta,
G. Asta.

GERMAN, per, Kolloid-Zeit und Zeit fur
Polymere, Vol 182, No 1-2, 1962, pp 50-60.

NTC 69-11482-07C

Sci-Chem
July 69

387,070

Wolfram, E.
ADHESION OF LIQUIDS TO SURFACES OF PLAS-
TICS. 25 Dec 62, 24p. (figs. omitted) 40 refs.
Order from SLA \$2.60 63-10890

Trans. of Kolloidzeitschrift (West Germany) 1962,
v. 182, no. 1/2, p. 75-85.

DESCRIPTORS: *Adhesion, Liquids, Surfaces,
*Plastics, Organic materials, *Polymers, Surface
tension, Surface properties.

(Materials--Plastics, TT, v. 10, no. 2)

63-10890

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plastics, Annealing, Quenching (Cooling), Particle
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DESCRIPTORS: *Acroleins, Polymerization,
*Aldehydes, Carboxylic acids, Amines, Alcohols,
Mercaptans, *Graft polymers, Biochemistry,
*Membranes.

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DESCRIPTORS: *Carcinogenic agents, *Anthracenes,
 Solubility, *Colloids, *Surface-active substances,
 Sodium compounds, *Sulfates.

The solubilization of anthracene in aqueous solutions of
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